

REMARKS

Favorable reconsideration and allowance of this application are requested.

1. Request for Continued Examination

As a procedural note, the present amendment is being filed concurrently with a formal Request for Continued Examination (RCE) under 37 CFR §1.114. Accordingly withdrawal of the "finality" of the December 8, 2010 Official Action is in order so as to allow entry and consideration of the amendments and remarks presented herewith.

2. Discussion of Claim Amendments

Pending independent claim 1 has been amended for purpose of clarity and to conform the same to the evidence presented concurrently herewith by way of the accompanying Supplemental Declaration of R. Satgurunathan ("the Supplemental Satgurunathan Declaration").

Specifically, claim 1 has been amended to clarify that vinyl polymer B comprises vinyl monomers comprising in total ≥ 70 wt% carbon, nitrogen and halogen based on vinyl monomer molecular weight. Support for such amendment can be found in the specification at page 10, line 39 bridging page 11, line 1. Claim 4 has thus been canceled as redundant.

Therefore, following entry of this amendment, claims 1-3 and 5-22 will remain pending herein for consideration.

3. Response to 35 USC §103(a) Rejections

Claims 1-9 and 12-22 have again attracted a rejection under 35 USC §103(a) as allegedly being unpatentable over Overbeek et al (GB 2362387) in view of Pears et al

(WO 93/24551). Applicants respectfully suggest that neither Overbeek et al nor Pears et al are appropriate references against the claims now pending herein.

To summarize at the outset, the presently claimed invention as defined by pending claim 1 is directed to aqueous coating compositions comprising 20 to 80 wt.% of a polyurethane A comprising polyols (a)(3) to (a)(5) which have a total ring structure content of ≥ 48 wt.%, and 80 to 20 wt.% of a vinyl polymer B with a $T_g \geq 20^\circ\text{C}$ which comprises ≥ 70 wt.% carbon (C), nitrogen (N) and halogen (X) based on the vinyl monomer total weight, which composition when in the form of a film exhibits a moisture vapour transmission rate (MVTR) of $\leq 500 \text{ g/m}^2/24\text{h}$.

The MVTR is defined under paragraph [0132] and determined according to ASTM D1653-91a as described in paragraphs [0168]-[0171] and Table 7 of the specification for the subject application.¹ MVTR value is indicative of the defect free nature and coherency of the coating, which reflects on the barrier (water/stain) performance of the coating. The stain resistance was defined under paragraph [0133] of the specification and determined according to the method DIN 68.861.Pt 1B as described under paragraphs [0180]-[0182] and Tables 12 and 13 of the specification. The C+N+X content was determined by calculation based on vinyl monomer molecular weight, as described in paragraph [0085] of the specification.

As is demonstrated in the accompanying Supplemental Satgurunathan Declaration, neither Overbeek et al nor Pears et al disclose vinyl polymers having a C+X+N content of ≥ 70 wt.% as is defined by the claims now pending herein. IN this regard, while only polymers AP1 and AP3 are vinyl polymers having a $T_g > 20^\circ\text{C}$, each of AP1 and AP3 in Overbeek et al have a C+N+X content well below the minimum value of 70wt.% as required by the presently pending claims herein.

¹ References are to the paragraph number of the published version of the specification, namely US 2007/0141264.

Moreover, the examples of Pears et al all have a C+N+X content of 62.2 wt.% based on the vinyl monomer molecular weight (again well below the requirement of the presently claimed invention that such vinyl monomers have a C+N+X content of ≥ 70 wt.% which are demonstrated by Example CE3 in the Supplemental Satgurunathan Declaration to have poor ethanol resistance and a MVTR value over 500 g/m²/24h.

Therefore, the coating compositions described in Overbeek et al and Pears et al, when in the form of a film would not inherently possess the exceptionally good MVTR and ethanol stain resistance characteristics of the coating compositions as defined by the pending claims herein. As such, an ordinarily skilled person would not “obviously” arrive at the presently claimed invention from either Overbeek et al or Pears et al.

Grandhee (USP 6342558) was combined with Overbeek et al and Pears et al to reject claims 10-11 under 35 USC §103(a). In this regard, the comments above with respect to Overbeek et al and Pears et al are equally germane here as Grandhee fails to cure the noted deficiencies. Simply stated, event though Grandhee teaches polyurethane acrylic hybrids (ABS) wherein the acrylic dispersion may comprise monomers such as trimethylolpropane triacrylate in order to partially crosslink the acrylic, such a disclosure when combined with Overbeek et al and Pears et al would not result in the compositions as now claimed herein.

Withdrawal of all rejections advanced against the prior claims under 35 USC §103(a) and early passage of this application to issue are therefore in order.

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4. Fee Authorization

The Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Account No. 14-1140.

Respectfully submitted,

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